Welcome

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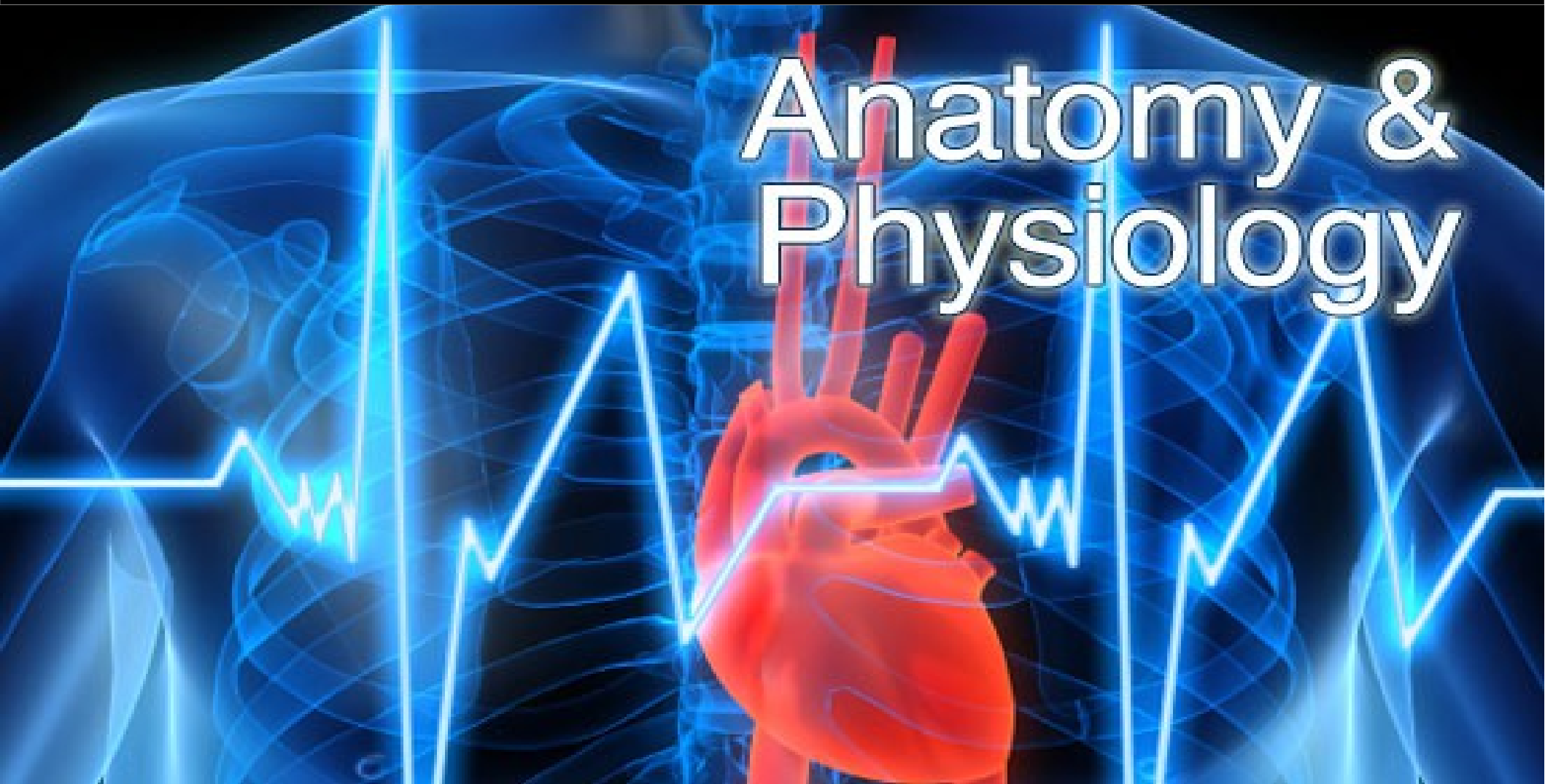

Learning AP Is Fun!

- My goal is to help you learn human anatomy and physiology.
- Success occurs when you are prepared for an opportunity! This class is an opportunity. (success = preparation + opportunity)
- Some students may need to develop new study habits to pass this class. You will need to prepare for lectures, labs, and exams.

- I will assume that everybody in this class is an adult.

- This means we have **"shared responsibilities"**
  - Be on time for the lectures and labs
  - Respect your classmates, support staff, and faculty.
  - Respect the lecture and lab resources.
  - Ask questions if you don't understand something.
  - Be prepared for lectures, labs, and exams. These are opportunities! I will have more to say about "what it means to be prepared".

About Anatomy and Physiology at MC3

- This is an introductory college level anatomy and physiology course.
- This is not a comprehensive AP course. We will not cover all topics in the textbook.
- You need to read a college level textbook (either the assigned or similar textbook). You need to read the topics covered in lecture before I cover the topics in lecture. This is part of your preparation for the lecture! (more to come about preparation)
- The course is designed for students interested in a career in allied health care.
- My Web site is designed to help you pass this class. Lecture slides, chapter study guides, Video Homework Assignments, Course Learning Objectives, and much more are posted at www.mc3cb.com
- The Web site also has "extra-in-depth-content". This information is not required but available for curious students.
- A red star (★) and/or red text on lecture slides are "important factoids" that are likely to be on the lecture exam!

Expectations

- What are your expectations for your AP professor? I assume you want a professor who is knowledgeable, passionate, and dedicated to helping you achieve your career goals. I also assume you want a professor to be on time, and be prepared for your lecture and lab sessions. **This is my promise to you!**

- *I have expectations for my students. I assume my students are passionate, curious, and need to learn anatomy and physiology. My students will follow* ***Michigan Educational Association's bench mark for study time*** *required to learn new lecture material. This benchmark is* ***"two to three hours per day per lecture hour". This is seven days a week for the next 16 weeks.***

- "Study time" is also required on the days when we have class! If you can't find time to study each day then you will fall behind. You will not be able to catch up! *If you do not have a solid science background then you may need to spend even more study time per day to keep up with this class.*

- Success in this class is all about "time on task"! If you are not willing to put in the time then you should not take this class. Remember, study time is an investment in your future.

- Without the proper amount of study time, it is unlikely that you will be able to earn an "A or B" If you study only one hour per day then you will likely fail this class. However, if you do what I ask you to do, then you should be able to earn an "A or B" in my class. (See Daily 24 Hr Worksheet)

MC3 Open Enrollment Policy

- MC3's open enrollment policy is good because anybody may take the class. MC3 open enrollment policy is bad because anybody may take the class, even those students that are not prepared for success.

- If you do not have basic knowledge about general biology, chemistry, physics, and math then you will find this class extremely difficult. You may still earn an "A" but you will need to learn the prerequisite knowledge you lack while you are learning anatomy and physiology.

- An open enrollment policy also means that many students are likely to start the class with different knowledge levels. It is like running a race where everyone starts the race at a different position. Some students in our class may already have a four year degree in biology. Other students may not have had a science class in 20 years.

- *Everyone is welcome to take this class. Any student who is passionately curious and willing to put in the necessary study time should be able to earn an "A".*

Lecture Room Conduct

- Before you come into the lecture room *please turn cell phones off and put your phones and laptop computer in your backpack* (read articles about the negative impact of digital devices in the lecture room on the Web site's Home Page). Research data shows all digital device in the classroom lowers test scores!
- Beverage is allowed in the lecture room. Food and snacks are not allowed in the lecture room.
- Once the lecture starts, the instructor will have the floor.
- Students are not allowed to "cross talk" during the lecture.
- Students need to be alert. If you fall asleep in the class then I will ask you to leave the room.
- Students are encouraged to ask question. When you have a question, please raise your hand and I will call on you.
- We will take a 10 minute break during the lecture.

Lab Session Conduct

- Beverage, food, and snacks **are not allowed** in the lab.
- Please wash your hands before coming into the lab. MC3 will provide gloves to wear for dissections. Follow all lab regulations (see lab agreement).
- You may use your phone and computer in lab to access lab resources. (Please leave the lab if you need to talk on your phone.)
- You need to prepare at home for lab. Do not use your lab time to prepare for lab. Before you come to lab, select the lab objectives that you want to identify in the lab session. Use your text book, lab manual, and Web site resources to familiarize yourself with the location of these structures. Don't come to lab without having a clear goal about the learning objectives you need to identify.
- I am your lab facilitator". This means I am not expected to show students the lab objectives or use your lab session to lecture. Lab instructors shall answer students questions and shall help students identify lab objectives. Students need to ask for help!
- I will have "group break out sessions" to discuss select models and charts.
- See lab safety form.

Collaborative Leaning

- Health care is a team effort. No one person may take the credit for a patient's healthcare. Therefore, it is important to learn how to collaborate with others. At MC3, we promote this idea in our lecture and lab classes.

- You need to form a study group (groups of three are best) in your lecture and lab classes. You need to meet with other students to compare and quiz each other using your Study Guide Questions. This will allow you to edit your answers. Flash cards (on paper not digital) are old school but are still the best learning aids!

- Lecture slides with red starts or red text is content likely to be on the Lecture Unit Exam. Remember, when you complete the study guide assignments, you are preparing for the unit exam. Study guide questions are exam questions!

- Here is a key idea. You need to ***learn new lecture topics daily as we cover the material in class***. Don't wait just before the the exam and then try to "cram" for the exam. You can't do it. If you try then you will fail the class.

- If you are serious about earning an "A" in this class, then this is how you do it! Don't work by yourself. This is a sure way to fail this class.

- ***The best way to advance your knowledge on any topic is to help someone learn the material!***

Lecture Preparation

- Here is what you need to do to be successful in my class. Your preparation occurs at home or in the library before you come to class.
  - First, read the topic(s) in the textbook that will be covered in the lecture.
  - Preview my lecture slides that I will be covered in the lecture. Make notes about questions that you need to ask during the lecture.
  - Complete Chapter Study Guide Questions before you come to class. The answers can be found in the textbook and/or lecture slides. The Study Guide Questions will follow the lecture slide sequence. If you can not find an answer or if you want to confirm your answer is right, then first ask one of your classmates to share their answer. If you still are not sure, then ask me in our lecture QA session. Exchanging ideas with other students is "active learning"!
  - Watch the Video Assignments and complete the video worksheets. These videos feature the most important lecture learning objectives.
  - This is your "preparation". If you can't do this then you should drop this class now. We can not succeed unless you are willing to prepare for lectures and labs before you come to class. If you don't prepare, then we both fail!
  - Bring your questions to class.

Chapter Study Guide Bonus Points

- To receive full credit (four bonus points) your Chapter Study Guides must be completed before we cover the chapter in lecture. There will be some exceptions to this rule and these occasions will be posted on the message board.
- The Study Guide Questions are the critical factoids that you need to know.
- Exam questions are Study Guide Questions. If you know the Study Guide Questions then you will earn an "A" on the lecture exam.
- Your Study Guide Answers should be detailed answers and not "one word answers".
- Your answers need to be written on a separate piece of paper.
- You need to compare your SG answers with other students so you may edit your answers and make your answers more complete. This is "active learning".
- I review your homework assignments for completion and not for correctness. This means it is critical for you to compare your answers with other students and confirm "correctness". If you are still not sure if your answers are correct then bring your questions to class.
- ***Study Guide Questions "are the exam questions". If we do not cover a question in class, but it is a study guide question, then it may still be on the exam.***

What happens if you do not prepare for lectures?

- If you come to lecture “prepared” then we may spend some of our lecture time in question and answer discussions. It is your preparation that will turn the lecture into a “question and answer” session. To answer your questions, I may refer to lecture slide(s). This then is a “discussion about the material” instead of me simply reading you my power-point slides.

- I will then have more time to “ask you questions” from the Chapter Study Guides. This means I can now focus on the most critical information that is likely to be on the lecture exam.

- This means everybody in the class must come to class prepared. If the majority of the students do not come to class prepared then the QA session crumbles.

- If you fail to prepare for the lecture sessions, then I will need to go back to the old boring routine of reading power-point slides to students.

- You have a vote. You will decide on how we conduct the class.

Lab Preparation

- Before coming to lab:
  - Determine the lab objectives you need to identify in the lab session
  - At home, use your textbook, lab book, and Web resources (i.e. like Google image) to identify the location of the selected lab objectives.
  - In lab, you need to quiz lab partners to identify lab objectives using the lab charts and models.
  - At the beginning of every lab session, review all lab objectives identified in previous lab sessions before you start to learn new structures.
  - Do not use your lab period to prepare for lab! This is a sure sign that you will not earn an “A” on the lab exam.
  - Do you know how to eat an elephant. You do it by taking one small bite at a time. Use the same technique to learn the unit lab objectives. Before each lab period, decide at home what you need to learn in lab, then come to lab and identify these structures using the models and charts.

Things You Need To Do

- First, you need to "unleash your imagination". You need to image your body not as a monolithic structure but as a collection of cells. The cells are made up of molecules which are constructed by even smaller structures called atoms. You can't see atoms but you and everything else in the universe are constructed from atoms. This may seem strange but it is true. So, to learn human physiology you need to use your imagination!

- Every day, you need to make quiet time for yourself . This is time when you can think. This is different than study time. Quiet time is a day dream state of mind. Einstein said that his quiet time was his most important time. Close your eyes and let your mind drift among all the factoids you know. It is here, in your quiet time, where you will start to understand human physiology.

- Ask yourself questions about how your body works. How do you move? Why do you eat? How do you remember where you parked your car yesterday? What is a smell? What is pain? What is consciousness? Is there free will? There are an endless list of questions you can ask. **You need to be passionately curious!**

- **Lastly, you need to trust me.** The foundation of my class is built on "best practices". You need to believe that when I ask you to do something, it is only because I want to help you achieve your career goal. You can not learn human physiology in 16 weeks. But you can start to build a solid foundation that will prepare you for a successful career in health care.

- **Preparation + Opportunity = Success**

Success = preparation + opportunity
(What are the opportunities?)

- Opportunities are what you prepare for. If you are not prepared for an opportunity then you will not be able to take advantage of the opportunity.
- In life, sometimes you may only get one chance at an opportunity.
- Opportunities should never be taken for granted.
- What are the opportunities in this class?
  - Lab sessions
  - Lecture sessions
  - Lab exams
  - Lecture exams
  - Video Homework Assignments
  - Chapter Study Guides
  - Homeostasis Definition
  - Working with other students.

Grades

- There are four unit exams. Your grade is the average of the four unit exams. The unit exam score is the average between a unit lab exam and a unit lecture score. The lab and lecture have equal value (i.e. 50% each).
- The lecture score is determined by a lecture exam (80%), Video Homework Assignments (18%), and writing out the homeostasis definition (2%). There is an additional four bonus points for doing the Chapter Study Guide Questions.
- The lab exam requires you to identify 50 structures from the Lab Learning Objectives. Each identified structure is worth two points.
- Video Homework Assignments and Chapter Study Guide Questions need to be turned in on-time to receive full credit. (Before the topic is covered in lecture.)
- Video assignments cover key lecture learning objectives. These topics are also covered in lecture. The videos are “comprehensive” and you have the opportunity to watch these videos multiple times if needed to understand the topic.
- You need to consider the “video assignments” as part of your lecture exam, therefore. Do not share your answers with other students before the due date. Sharing these answers with other students will be considered “cheating” and both parties will receive no credit for the assignment.
- See syllabus for Science Departments Grading Scale.

What is the best way to learn physiology?

- Turn each topic into a story, a type of narrative. A narrative is a spoken or written account of connected events (i.e. your AP factoids). Every good story needs to have a beginning, a middle, and an end.

- To learn human physiology, you first need to memorize some (many) factoids. These factoids are like the pieces to a puzzle. You will need to connect the "factoids" together to create a story about your topic. This is a concept Greek orators used 2500 years ago to memorize their speeches!

- At first, the story should be simple, only a few factoids. But as you learn more factoids, you may add new factoids to your story. When you tell your story to someone, remember to make sure you include a beginning, a middle, and an end.

- *Here is advise from someone considered to be the most brilliant scientist ever born in the United States. He said this is the best way to see if you really understand the subject. Tell your story to a ten year old child in a way so they understand the story.* (Dr. Richard Feynman, PhD Theoretical Physics on How to Learn Anything)

- So learning physiology should not be hard. You just have to practice telling your story to a ten year old.

Carpe diem

Carpe diem is a phrase that comes from the Roman poet Horace (65 BC to 8 BC). Carpe diem means literally "Pluck the day", though it's usually translated as "Seize the Day".

For students, a better translation might be "Do everything you can do today to make tomorrow better".

Remember, the time you spend to prepare for your lectures and labs, and the study-time that you spend to learn the Science Department's Learning Objectives, are "**investments in your future".**

You are the only person that may put a value on your education!

Ask yourself this, "Where do I want to be next year,three years from now, or ten years from now"? Time is your enemy but time is the most valuable asset you have. *You will be rewarded for the sacrifices you make today by having a brighter future tomorrow*.

Seneca (another Roman orator) said, "It is not that we have a short space of time, but that we waste much of it."

Carpe diem!